



# University of Hawaii at Manoa

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## HB 3299 HD 2 RELATING TO ENERGY CONSERVATION

Statement for Senate Committee on  
Energy and Natural Resources  
March 16, 1990

By

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The purpose of this bill is to require the installation of solar energy systems or heat pumps for water heating in all new multi-unit residential buildings and hotels and to provide a 50 percent tax credit for the installation of solar water heating systems and heat pumps in new and existing buildings.

Our statement on this bill does not represent an institutional position of the University of Hawaii.

We certainly concur with the intent of this bill and the need to encourage energy savings through a requirement for solar water heaters, heat pumps, and tax credits.

We have submitted testimony at previous hearings on this bill as well as at hearings on related bills. Each of our statements have had as their central point our support for legislation to encourage the use of energy efficient water heating devices. While we continue to support the intent of HB 3299 HD 2, our statement today reflects some change from our previous statements.

In previous hearings on related bills, the inclusion of gas water heaters for tax credits has been proposed. In general, we have opposed tax credit for gas water heaters on the basis that they are 100 percent dependent on fossil fuels whose reduction in use is presumably the primary intent of this bill. However, recent testimony provided by both the Hawaiian Electric Company and The Gas Company leads us to rethink our position. What seems particularly important is to reduce the use of

electric water heaters which are recognized by all as using the most fossil fuel. Furthermore, according to testimony by The Gas Company, a significant fraction of the gas that is used for water heaters is produced as a byproduct of their refinery operations. Because the number of electric water heaters installed each year so far exceeds the number of gas heaters, an estimated 3500 to 700, some additional incentives such as a 10 percent tax credit for gas water heaters might encourage less use of electric heaters and hence greater savings of fossil fuels. We have some specific comments with regard to the language of HB 3299 HD 2.

Page 2, line 2: Refers to a 50 percent tax credit for solar water heating systems and heat pumps. This is inconsistent with page 4, line 7, that limits the credit to 25 percent for heat pumps.

According to page 3, lines 13-16: Solar water heating to pre-heat water is required even in the case of inadequate roof area and electric back-up heaters are permitted when installed in conjunction with solar water heating systems. If the roof area is very small it may be economically and operationally unreasonable to require a solar water heating pre-heat system. Certainly the option for use of heat pumps should be included. Similarly, the use of heat pumps in conjunction with solar systems for backup heaters should be included.

Would a tax credit for gas water heaters be permitted under paragraph 2, page 4, line 6?

Page 4, line 15: Sentence structure seems incorrect. The intent is not clear.